

User's Guide



PS 123 12 VDC, 3 Amp Power Supply

68-1253-01 Rev. C
07 07



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Precautions

Safety Instructions • English



This symbol is intended to alert the user of important operating and maintenance (servicing) instructions in the literature provided with the equipment.



This symbol is intended to alert the user of the presence of uninsulated dangerous voltage within the product's enclosure that may present a risk of electric shock.

Caution

Read Instructions • Read and understand all safety and operating instructions before using the equipment.

Retain Instructions • The safety instructions should be kept for future reference.

Follow Warnings • Follow all warnings and instructions marked on the equipment or in the user information.

Avoid Attachments • Do not use tools or attachments that are not recommended by the equipment manufacturer because they may be hazardous.

Consignes de Sécurité • Français



Ce symbole sert à avertir l'utilisateur que la documentation fournie avec le matériel contient des instructions importantes concernant l'exploitation et la maintenance (réparation).



Ce symbole sert à avertir l'utilisateur de la présence dans le boîtier de l'appareil de tensions dangereuses non isolées posant des risques d'électrocution.

Attention

Lire les instructions • Prendre connaissance de toutes les consignes de sécurité et d'exploitation avant d'utiliser le matériel.

Conservr les instructions • Ranger les consignes de sécurité afin de pouvoir les consulter à l'avenir.

Respecter les avertissements • Observer tous les avertissements et consignes marqués sur le matériel ou présentés dans la documentation utilisateur.

Éviter les pièces de fixation • Ne pas utiliser de pièces de fixation ni d'outils non recommandés par le fabricant du matériel car cela risquerait de poser certains dangers.

Sicherheitsanleitungen • Deutsch



Dieses Symbol soll dem Benutzer in der im Lieferumfang enthaltenen Dokumentation besonders wichtige Hinweise zur Bedienung und Wartung (Instandhaltung) geben.



Dieses Symbol soll den Benutzer darauf aufmerksam machen, daß im Inneren des Gehäuses dieses Produktes gefährliche Spannungen, die nicht isoliert sind und die einen elektrischen Schock verursachen können, herrschen.

Achtung

Lesen der Anleitungen • Bevor Sie das Gerät zum ersten Mal verwenden, sollten Sie alle Sicherheits- und Bedienungsanleitungen genau durchlesen und verstehen.

Aufbewahren der Anleitungen • Die Hinweise zur elektrischen Sicherheit des Produktes sollten Sie aufbewahren, damit Sie im Bedarfsfall darauf zurückgreifen können.

Befolgen der Warnhinweise • Befolgen Sie alle Warnhinweise und Anleitungen auf dem Gerät oder in der Benutzerdokumentation.

Keine Zusatzgeräte • Verwenden Sie keine Werkzeuge oder Zusatzgeräte, die nicht ausdrücklich vom Hersteller empfohlen wurden, da diese eine Gefahrenquelle darstellen können.

Instrucciones de seguridad • Español



Este símbolo se utiliza para advertir al usuario sobre instrucciones importantes de operación y mantenimiento (o cambio de partes) que se desean destacar en el contenido de la documentación suministrada con los equipos.



Este símbolo se utiliza para advertir al usuario sobre la presencia de elementos con voltaje peligroso sin protección aislante, que puedan encontrarse dentro de la caja o alojamiento del producto, y que puedan representar riesgo de electrocución.

Precaución

Leer las instrucciones • Leer y analizar todas las instrucciones de operación y seguridad, antes de usar el equipo.

Conservar las instrucciones • Conservar las instrucciones de seguridad para futura consulta.

Obedecer las advertencias • Todas las advertencias e instrucciones marcadas en el equipo o en la documentación del usuario, deben ser obedecidas.

Evitar el uso de accesorios • No usar herramientas o accesorios que no sean específicamente recomendados por el fabricante, ya que podrían implicar riesgos.

Warning

Power sources • This equipment should be operated only from the power source indicated on the product. This equipment is intended to be used with a main power system with a grounded (neutral) conductor. The third (grounding) pin is a safety feature, do not attempt to bypass or disable it.

Power disconnection • To remove power from the equipment safely, remove all power cords from the rear of the equipment, or the desktop power module (if detachable), or from the power source receptacle (wall plug).

Power cord protection • Power cords should be routed so that they are not likely to be stepped on or pinched by items placed upon or against them.

Servicing • Refer all servicing to qualified service personnel. There are no user-serviceable parts inside. To prevent the risk of shock, do not attempt to service this equipment yourself because opening or removing covers may expose you to dangerous voltage or other hazards.

Slots and openings • If the equipment has slots or holes in the enclosure, these are provided to prevent overheating of sensitive components inside. These openings must never be blocked by other objects.

Lithium battery • There is a danger of explosion if battery is incorrectly replaced. Replace it only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Avertissement

Alimentations • Ne faire fonctionner ce matériel qu'avec la source d'alimentation indiquée sur l'appareil. Ce matériel doit être utilisé avec une alimentation principale comportant un fil de terre (neutre). Le troisième contact (de mise à la terre) constitue un dispositif de sécurité : n'essayez pas de la contourner ni de la désactiver.

Déconnexion de l'alimentation • Pour mettre le matériel hors tension sans danger, déconnectez tous les cordons d'alimentation de l'arrière de l'appareil ou du module d'alimentation de bureau (s'il est amovible) ou encore de la prise secteur.

Protection du cordon d'alimentation • Acheminer les cordons d'alimentation de manière à ce que personne ne risque de marcher dessus et à ce qu'ils ne soient pas écrasés ou pincés par des objets.

Réparation-maintenance • Faire exécuter toutes les interventions de réparation-maintenance par un technicien qualifié. Aucun des éléments internes ne peut être réparé par l'utilisateur. Afin d'éviter tout danger d'électrocution, l'utilisateur ne doit pas essayer de procéder lui-même à ces opérations car l'ouverture ou le retrait des couvercles risquent de l'exposer à de hautes tensions et/ou des orifices.

Fentes et orifices • Si le boîtier de l'appareil comporte des fentes ou des orifices, ceux-ci servent à empêcher les composants internes sensibles de surchauffer. Ces ouvertures ne doivent jamais être bloquées par des objets.

Lithium Batterie • Il a danger d'explosion s'il y a remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du meme type ou d'un type equivalent recommande par le constructeur. Mettre au reut les batteries usagées conformément aux instructions du fabricant.

Vorsicht

Stromquellen • Dieses Gerät sollte nur über die auf dem Produkt angegebene Stromquelle betrieben werden. Dieses Gerät wurde für eine Verwendung mit einer Hauptstromleitung mit einem geerdeten (neutralen) Leiter konzipiert. Der dritte Kontakt ist für einen Erdsanschluß, und stellt eine Sicherheitsfunktion dar. Diese sollte nicht umgangen oder außer Betrieb gesetzt werden.

Stromunterbrechung • Um das Gerät auf sichere Weise vom Netz zu trennen, sollten Sie alle Netzkabel aus der Rückseite des Gerätes, aus der externen Stromversorgung (falls dies möglich ist) oder aus der Wandsteckdose ziehen.

Schutz des Netzkabels • Netzkabel sollten stets so verlegt werden, daß sie nicht im Weg liegen und niemand darauf treten kann oder Objekte darauf- oder unmittelbar dagegen gestellt werden können.

Wartung • Alle Wartungsmaßnahmen sollten nur von qualifiziertem Servicepersonal durchgeführt werden. Die internen Komponenten des Gerätes sind wartungsfrei. Zur Vermeidung eines elektrischen Schocks versuchen Sie in keinem Fall, dieses Gerät selbst öffnen, da beim Entfernen der Abdeckungen die Gefahr eines elektrischen Schlags und/oder andere Gefahren bestehen.

Schlitze und Öffnungen • Wenn das Gerät Schlitze oder Löcher im Gehäuse aufweist, dienen diese zur Vermeidung einer Überhitzung der empfindlichen Teile im Inneren. Diese Öffnungen dürfen niemals von anderen Objekten blockiert werden.

Lithium-Batterie • Explosionsgefahr, falls die Batterie nicht richtig ersetzt wird. Ersetzen Sie verbrauchte Batterien nur durch den gleichen oder einen vergleichbaren Batterietyp, der auch vom Hersteller empfohlen wird. Entsorgen Sie verbrauchte Batterien bitte gemäß den Herstelleranweisungen.

Advertencia

Alimentación eléctrica • Este equipo debe conectarse únicamente a la fuente/tipo de alimentación eléctrica indicada en el mismo. La alimentación eléctrica de este equipo debe provenir de un sistema de distribución general con conductor neutro a tierra. La tercera pata (puesta a tierra) es una medida de seguridad, no puentearla ni eliminarla.

Desconexión de alimentación eléctrica • Para desconectar con seguridad la acometida de alimentación eléctrica al equipo, desenchufar todos los cables de alimentación en el panel trasero del equipo, o desenchufar el módulo de alimentación (si fuera independiente), o desenchufar el cable del receptáculo de la pared.

Protección del cables de alimentación • Los cables de alimentación eléctrica se deben instalar en lugares donde no sean pisados ni apretados por objetos que se puedan apoyar sobre ellos.

Reparaciones/mantenimiento • Solicitar siempre los servicios técnicos de personal calificado. En el interior no hay partes a las que el usuario deba acceder. Para evitar riesgo de electrocución, no intentar personalmente la reparación/mantenimiento de este equipo, ya que al abrir o extraer las tapas puede quedar expuesto a voltajes peligrosos u otros riesgos.

Ranuras y aberturas • Si el equipo posee ranuras o orificios en su caja/alojamiento, es para evitar el sobrecalentamiento de componentes internos sensibles. Estas aberturas nunca se deben obstruir con otros objetos.

Batería de litio • Existe riesgo de explosión si esta batería se coloca en la posición incorrecta. Cambiar esta batería únicamente con el mismo tipo (o su equivalente) recomendado por el fabricante. Desachar las baterías usadas siguiendo las instrucciones del fabricante.

Extron's Warranty

Extron Electronics warrants this product against defects in materials and workmanship for a period of three years from the date of purchase. In the event of malfunction during the warranty period attributable directly to faulty workmanship and/or materials, Extron Electronics will, at its option, repair or replace said products or components, to whatever extent it shall deem necessary to restore said product to proper operating condition, provided that it is returned within the warranty period, with proof of purchase and description of malfunction to:

USA, Canada, South America, and Central America:

Extron Electronics
1001 East Ball Road
Anaheim, CA 92805, USA

Europe, Africa, and the Middle East:

Extron Electronics, Europe
Beeldschermweg 6C
3821 AH Amersfoort
The Netherlands

Japan:

Extron Electronics, Japan
Kyodo Building
16 Ichibancho
Chiyoda-ku, Tokyo 102-0082
Japan

This Limited Warranty does not apply if the fault has been caused by misuse, improper handling care, electrical or mechanical abuse, abnormal operating conditions or non-Extron authorized modification to the product.

If it has been determined that the product is defective, please call Extron and ask for an Applications Engineer at (714) 491-1500 (USA), 31.33.453.4040 (Europe), 65.6383.4400 (Asia), or 81.3.3511.7655 (Japan) to receive an RA# (Return Authorization number). This will begin the repair process as quickly as possible.

Units must be returned insured, with shipping charges prepaid. If not insured, you assume the risk of loss or damage during shipment. Returned units must include the serial number and a description of the problem, as well as the name of the person to contact in case there are any questions.

Extron Electronics makes no further warranties either expressed or implied with respect to the product and its quality, performance, merchantability, or fitness for any particular use. In no event will Extron Electronics be liable for direct, indirect, or consequential damages resulting from any defect in this product even if Extron Electronics has been advised of such damage.

Please note that laws vary from state to state and country to country, and that some provisions of this warranty may not apply to you.

安全须知 • 中文



这个符号提示用户该设备用户手册中的操作和维护说明。



这个符号警告用户该设备机壳内暴露的危险电压，有触电危险。

注意

阅读说明书 • 用户使用该设备前必须阅读并理解有安全和使用说明。

保存说明书 • 用户应保存安全说明书以备将来使用。
遵守警告 • 用户应遵守产品和用户指南上的所有安全和操作说明。

避免追加 • 不要使用该产品厂商没有推荐的工具或追加设备，以避免危险。

警告

电源 • 该设备只能使用产品上标明的电源。设备必用有地线供电系统供电。第三条线（地线）是安设施，不能不用或跳过。

拔掉电源 • 为安全地从设备拔掉电源，请拔掉所有设备后或桌面电源的电源线，或任何接到市电系统电源线。

电源线保护 • 妥善布线，避免被踩踏，或重物挤压。

维护 • 所有维修必须由认证的维修人员进行。设备部没有用户可以更换的零件。为避免出现触电危险不要自己试图打开设备盖子维修该设备。

通风孔 • 有些设备机壳上有通风槽或孔，它们是用防止机内敏感元件过热。不要用任何东西挡住通风孔。

锂电池 • 不正确的更换电池会有爆炸的危险。必须使与厂家推荐的相同或相近型号的电池。按照生产厂的议处理废弃电池。

FCC Class A Notice

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Note: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance.

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Introduction

The Extron PS 123 is a high performance, plenum rated, DC power supply that accepts a 100 VAC to 240 VAC input and outputs 12 VDC, 3 amp maximum for the total current of the eight outputs. The DC outputs are on two-pole captive screw connectors, with no per-output current limitation. Two-tone LEDs on the front and rear panel indicate normal operation (green) and overload operation (red).

The rack mountable PS 123 has a 1U high, quarter rack wide, 8.5" deep metal enclosure, allowing the PS 123 to take advantage of a variety of mounting options.

Front and Rear Panel Features

All power and output connections are on the rear panel. LEDs show power status on the front and rear of the power supply (figure 1, ①).

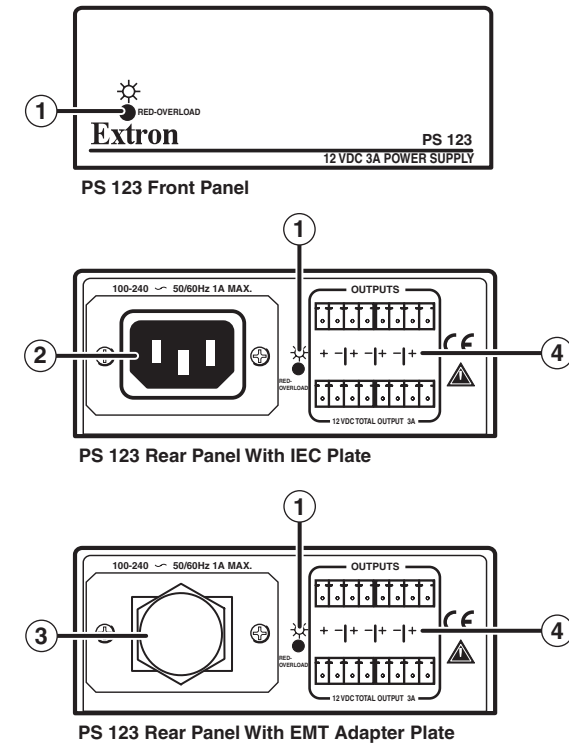


Figure 1 — PS 123 front and rear panels

LED indicators

See the illustrations on page 1.

- ① **Power status LEDs** — These front and rear panel LEDs indicate the PS 123's status by lighting as follows:
 - **Green** when power is applied and operation is normal
 - **Red** when applied power causes a current overload condition

CAUTION *Continued operation in an overload condition causes premature power supply failure.*

- **Unlit** when an output is shorted

NOTE *To identify the shorted output, unplug the outputs one at a time until the LEDs light green.*

Power

You can apply power to the PS 123 either by using the supplied IEC power cord (②) or by installing the optional Flexible Conduit Adapter Kit (Extron part #70-228-02) (③).

- ② **IEC connector/power supply** — Plug the external IEC cord into this connector and a 100–240 VDC source.

- OR-
- ③ **Optional conduit EMT adapter plate** — The IEC connector and EMT plate can be replaced by this half-inch conduit EMT adapter plate, as shown in figure 2. See “Input power — using the Flexible Conduit Adapter Kit,” on the next page.

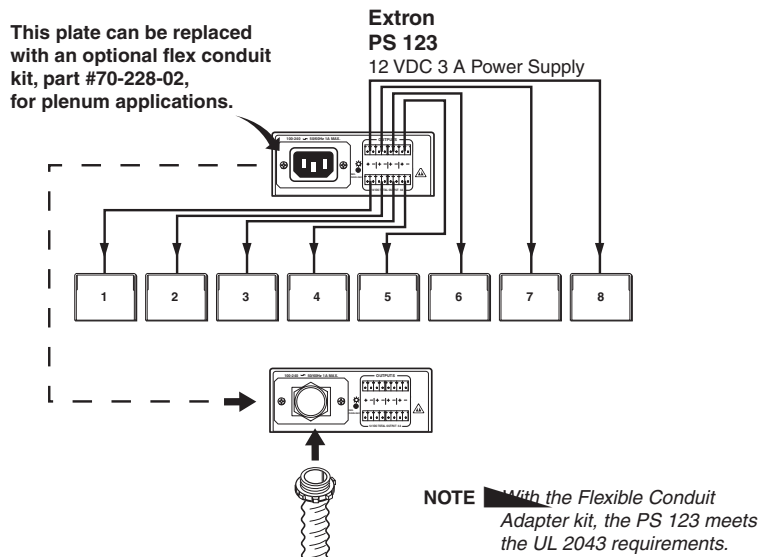


Figure 2 — Using the conduit option for the PS 123

Outputs

- ④ **DC Output connectors** — Connect the power cables from the devices that will receive power from the PS 123 to these 3.5 mm captive screw connectors.

The PS 123 supports up to eight power supply outputs. For details on limitations and how to wire these captive screw connectors, see “Output power — wiring the DC output connectors,” on page 7.

Connections

Input power — using the IEC power cord

Use the included IEC power cord to connect the PS 123 to a 100 VAC to 240 VAC, 50/60 Hz power source.

Make sure that the source device, the PS 123, and all output devices are turned off and disconnected from the power source before you begin.

WARNING *The circuit breaker used for this connection should be rated no lower than 20 amps.*

Input power — using the Flexible Conduit Adapter Kit

The optional Flexible Conduit Adapter Kit consists of

- One EMT adaptor plate
- One 6-foot long conduit
- Three 7.5 feet, 18-gauge spade connector power wires
- One UL rated zip tie wrap
- Three auxiliary crimp style spade connectors designed for 14- to 16-gauge wires

NOTE *If needed, Extron recommends using a UL-rated crimp tool to terminate the spade connectors. One recommended choice is the Molex crimp tool (Molex part #19285-0008).*

The kit provides a convenient means to replace the PS 123 IEC power cord with conduit, where required by local codes.

Make sure that the source device, the PS 123, and all output devices are turned off and disconnected from the power source before you begin.

WARNING *The circuit breaker used for this connection should be rated no lower than 20 amps.*

WARNING Installation and service must be performed by a qualified electrician only.

CAUTION A UL listed electrical distribution box is recommended for the termination of the conduit opposite the PS 123 power supply. See "UL requirements," below.

UL requirements

The Underwriters Laboratories (UL) requirements listed below pertain to the installation of the flexible conduit onto a PS 123 power supply.

- This unit is not to be used beyond its rated voltage range.
- This unit must be wired to a UL listed distribution box.

NOTE The UL approved electrical distribution box is not included with either the PS 123 power supply or the Flexible Conduit Adapter Kit; the installer is responsible for obtaining and installing the box.

- This unit must be installed in accordance with the National Electrical Code and with all local codes.

Installing the flexible conduit cable

Install the flexible conduit cable assembly to the PS 123 as follows:

1. Unplug the IEC power cord.
2. Remove and retain the two Phillips head screws that secure the **EMT plate** (figure 3, below) to the PS 123 rear panel.

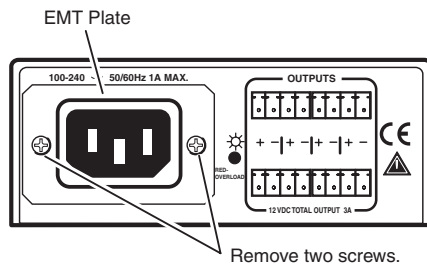


Figure 3 — Removing the EMT plate

3. Remove and retain the six screws that connect the top cover of the PS 123 to its bottom board (figure 4, on the next page).

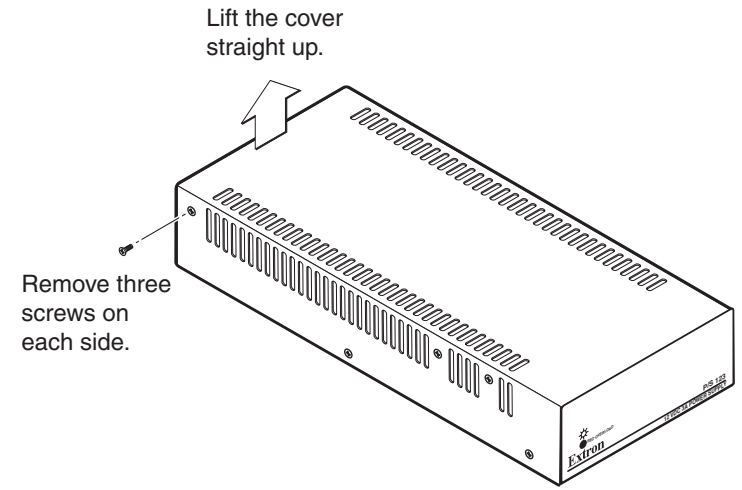


Figure 4 — Removing the top cover

4. Carefully lift the top cover up, taking care not to remove it completely.

CAUTION Rough handling of the top cover can tear the wiring that connects the front panel LED.

5. Use the Phillips head end of an Extron Tweezer or a small standard screwdriver to loosen the screws holding the hot and neutral wires on the side of the terminal block nearest the EMT plate opening (figure 5).

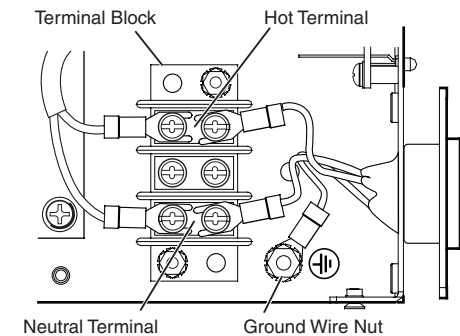


Figure 5 — Terminal block and IEC wiring

6. Unscrew the EMT plate ground wire from the **ground wire nut** on the bare metal bottom of the PS 123 enclosure.

7. From the rear panel end, pull the EMT plate (see figure 3) out of the enclosure.
8. Thread the 18-gauge power wires through the length of the electrical conduit tube.
9. Install the EMT adapter plate (figure 1, ③, on page 1) (with conduit attached) into the opening from which you removed the EMT plate in step 7. Use the Phillips head screws (figure 3) that you removed in step 2 to attach the adapter plate.
10. Slide the conduit nut (figure 6, below) over the bundle of wires exiting the conduit and onto the conduit itself *inside* the PS 123. Hand-tighten the nut.

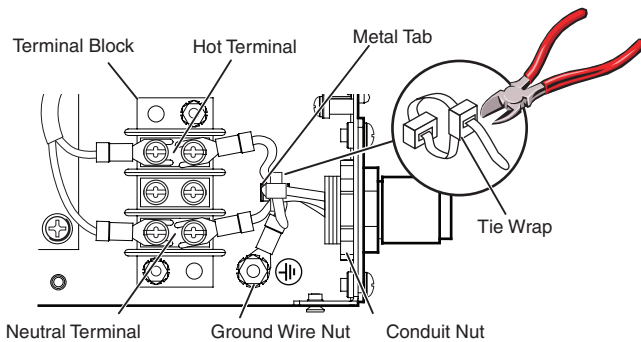


Figure 6 — Terminal block and conduit wiring

11. Attach and screw down the **hot** and **neutral** wires exiting from the conduit to their corresponding screws on the terminal block.

WARNING Ensure that you observe wire polarity. Figure 6 shows the location of the neutral and hot poles on the mother board connector. The conduit wiring harness' neutral wire is identified with a tag marked "N" (neutral).

12. Attach the ground wire from the conduit to the PS 123's bare metal plate bottom, securing it by reattaching the ground wire nut.
13. Thread a tie wrap through the metal tab on the bare metal bottom of the PS 123, place all the wires within its cradle, and zip the tie wrap over the bundle of wires.
14. Retighten the conduit nut from step 10 (figure 6 above) to ensure that it firmly secures the conduit EMT adapter plate to the power supply.

15. Use the six screws you removed in step 3 to secure the top cover of the PS 123 back onto its bottom board (figure 4 on page 5).

Output power — wiring the DC output connectors

The PS 123 can power multiple products through its 3.5 mm, 2-pole captive screw connectors.

NOTE For applications in which power supply voltage is critical, verify the power cord's polarity before connecting it by plugging in the power supply with no load. Check the output with a voltmeter.

WARNING If you are verifying power supply polarity with a voltmeter, the two power cord wires must be kept separate while the power supply is plugged in.

To connect products to the outputs of the PS 123, do the following:

1. Cut the DC output cord to the length required.
2. Strip the jacket of the conductor wire to expose 5/16" (7 mm) of the wire (figure 7).

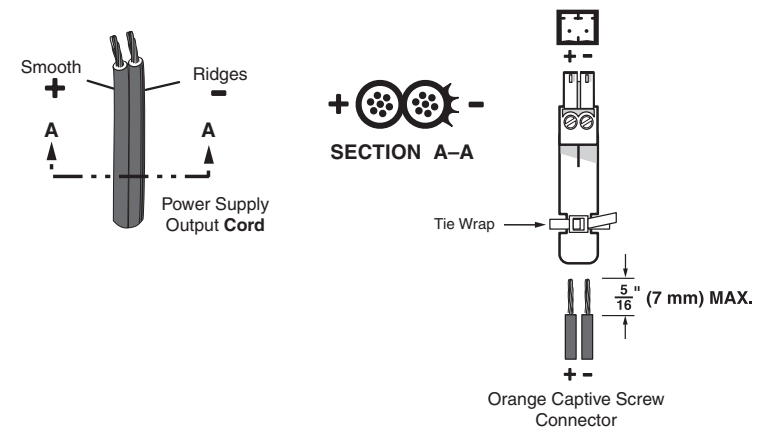


Figure 7 — Power connector wiring

WARNING The ideal length of exposed wire is 5/16" (7 mm). Exposing more than the specified length of the copper wires could allow the stripped wires to touch each other, causing a short circuit. This could result in the external DC power supply overheating and/or burning.

CAUTION Stripping the wires to expose less than the recommended amount may cause them to slide out of the connector too easily, even if they are tightly pinched by the captive screws.

CAUTION Do not tin the stripped power supply leads before attaching the captive screw plug to them. Tinned wires are not as secure in the captive screw connectors and can be easily pulled out. They may also break after being bent several times.

3. Slide the leads into the supplied 2-pin captive screw plug and secure them, using an Extron Tweeker or other small screwdriver.
4. Use the supplied tie wrap to strap the power cord to the extended tail of the connector.

Mounting options

There are several optional accessories for mounting the PS 123. They include the following Extron part numbers:

- RSU 129 1U 9.5" Universal Rack Shelf (part #60-190-01)
- RSB 129 1U 9.5" Deep Basic Rack Shelf (part #60-604-01)
- MBU 125 1U Under-Desk Mounting (part #70-077-01)
- PMK 350 Low Profile Multi-product Projector Mounting Kit (part #70-563-02, -03)
- PMK 450 Easy Installation Multi-product Projector Mounting Kit (part #70-618-02, -03)

Rack mounting

UL rack mounting requirements

The following Underwriters Laboratories (UL) requirements pertain to the installation of the PS 123 into a rack.

- **Elevated operating ambient temperature** — If the equipment is installed in a closed or multiunit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consider installing the equipment in an environment compatible with the maximum ambient temperature (T_{ma}) specified by the manufacturer. For the PS 123, the T_{ma} is 122 °F (50 °C).
- **Reduced air flow** — Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

- **Mechanical loading** — Mounting of the equipment in the rack should be such that a hazardous condition is not created due to uneven mechanical loading.
- **Circuit overloading** — Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- **Reliable earthing (grounding)** — Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

Rack mounting procedure

For optional rack mounting, mount up to four PS 123s on an RSU 129 9.5" 1U Universal Rack Shelf (part #60-190-01) (figure 8) or an RSB 129 9.5" 1U Basic Rack Shelf (part #60-604-01).

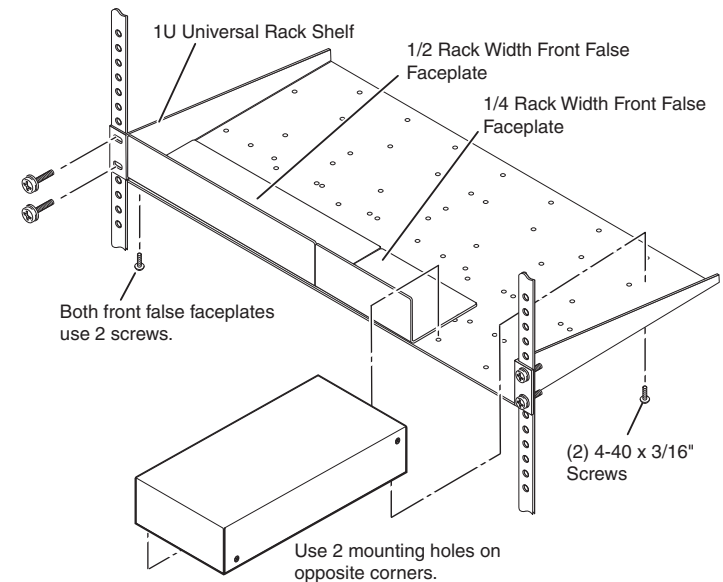


Figure 8 — Rack mounting the PS 123

1. If feet were previously installed on the bottom of the PS 123 unit, remove them.

2. Mount the PS 123 on the rack shelf, using two 4-40 x 3/16" screws in opposite (diagonal) corners.
3. If necessary, mount the half rack width false front panel (included with the Universal Rack Shelf only) and/or the quarter rack width false front panel (included with the PS 123) to the shelf, using two 4-40 x 3/16" screws in the front holes for each panel.

Under-desk mounting

In addition to using the PS 123 power supply on a rack or projector, it can also be mounted under furniture (such as a desk) using the MBU 125 Under-Desk Mounting Kit (part #70-077-01). To mount the PS 123 under a desk or other furniture, follow these steps:

1. Attach the mounting brackets to the power supply with the provided machine screws (figure 9).
2. Hold the power supply with the attached brackets against the underside of the furniture. Mark the location of the screw holes of the bracket on the mounting surface.
3. Drill 3/32" (2 mm) diameter pilot holes, 1/4" (6.3 mm) deep in the mounting surface at the marked screw locations.
4. Insert #8 wood screws into the four pilot holes. Tighten each screw into the mounting surface until just less than 1/4" of the screw head protrudes.

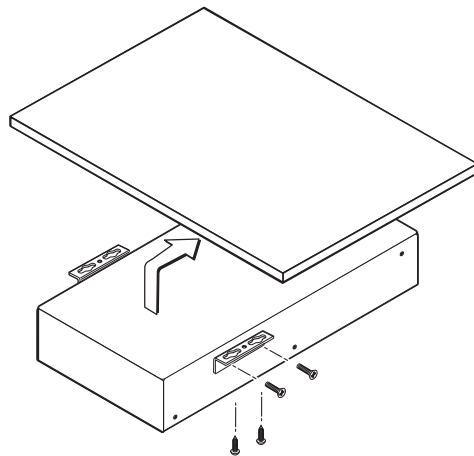


Figure 9 — Under-desk mounting the PS 123

5. Align the mounting screws with the slots in the brackets and place the power supply against the surface, with the screws through the bracket slots.
6. Slide the unit slightly forward or back, then tighten all four screws to secure it in place.

Projector mounting

PMK 350

The PMK 350 is an above-projector mounting kit that attaches to a 1" to 2" diameter projector mounting pole (figure 10). It can hold more than one device, in a variety of sizes. The PMK 350 is available in black (part #70-563-02) or white (part #70-563-03).

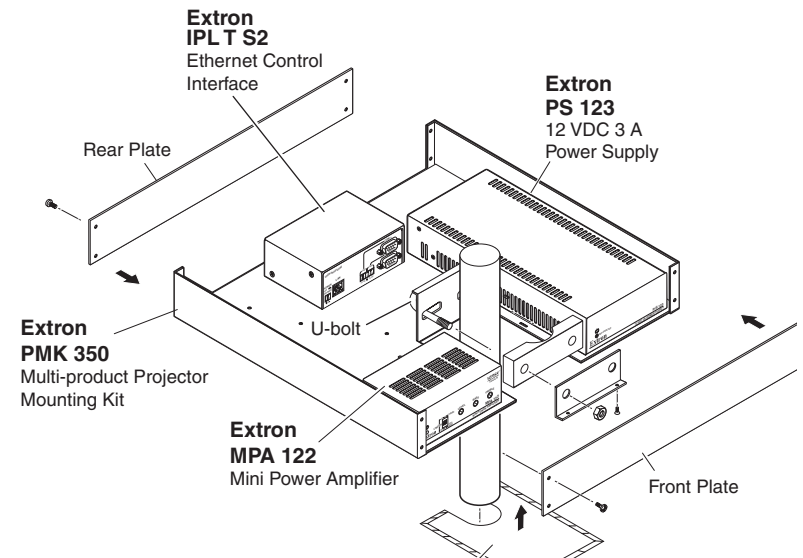


Figure 10 — Projector mounting the PS 123

Follow these steps to mount the PS 123 onto the PMK 350 bracket:

1. Remove the front and back plates from the PMK 350 (figure 10), using an Extron Tweezer or a #2 Phillips screwdriver. Retain the screws to reattach the plates when you are finished.
2. If necessary, remove the feet from the bottom of the PS 123.
3. Secure the unit to one side of the mounting tray, using two of the 4-40 x 3/16" screws in opposite (diagonal) corners.
4. Place the PMK 350 around the projector ceiling mounting pole (figure 10, above).

5. Assemble the U-bolt and the following parts in the following order (figure 11, below):
 - a. Pass the legs of the U-bolt through the slotted holes on the mount plate flange.
 - b. Place the legs around the projector pole.
 - c. Pass the legs through the holes in the contour base.

NOTE *The pole fits snugly into the depression in the center of the contoured base.*

- d. Pass the legs through the holes in the L-shaped bracket.
 - **For a typical (1.5" to 2.0" diameter) pole** — You can use the supplied square U-bolt, which fits a typical ceiling pole.
 - **For a smaller pole** — Locally obtain a square U-bolt that fits your ceiling pole. The slotted holes on the bracket can accommodate a square U-bolt for pole sizes from 1.0" to 2.0" in diameter.

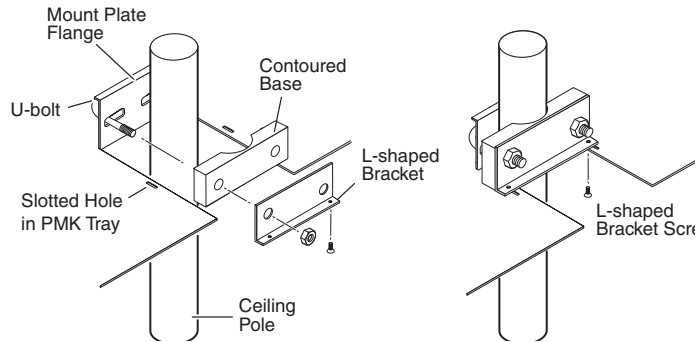


Figure 11 — Projector mounting the PS 123

6. Align the two slotted holes in the bottom of the L-shaped bracket with the two slotted holes in the base of the tray. Secure the L-bracket to the base by inserting two provided 6-32 x 5/16" screws through the aligned slots.
7. Move the PMK 350 up to the desired location on the ceiling pole, as close to the ceiling as desired.
8. Secure the L-shaped bracket to the U-bolt using the included hex nuts, washers, and lock washers. Tighten the hex nuts securely.

CAUTION *Be sure to tighten the hex nuts securely enough that the PMK 350 does not slide down the ceiling pole. A socket wrench is recommended to tighten the hex nuts.*

9. Secure the front panel to the mounting tray with four of the included #6 screws.
10. If desired, choose one of the provided four sizes of self-adhesive cover sheets, and apply it to the underside of the mounting tray.

PMK 450

The Extron PMK 450 Easy Installation Multi-Product Projector Mounting Kit attaches to projector mounting poles with external diameters of 1.85" (4.7 cm) to 1.95" (5 cm). It can accommodate multiple Extron products of a variety of sizes, and their power supplies.

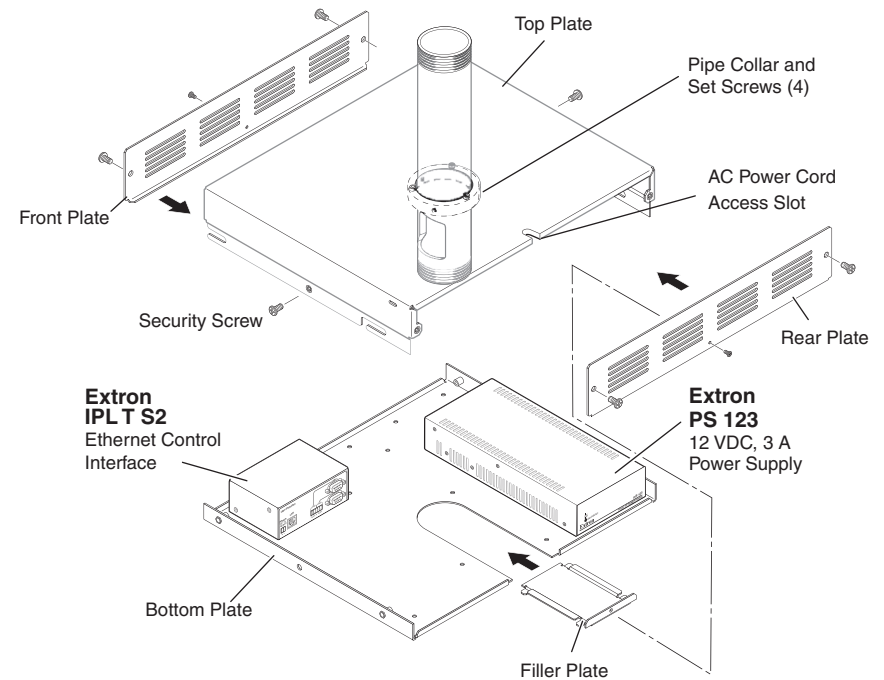


Figure 12 — Components of the Extron PMK 450 kit

1. Using a Phillips screwdriver, remove the front and rear plates.
2. Using the provided security wrench, remove the security screws from the sides. Slide the top plate and lift it away from the bottom plate.
3. Loosen the four pipe collar set screws to allow the top plate to move freely along the pole.

4. Ensure that the cables exit the end of the pipe and not the cable access hole.
5. Remove any rubber feet from the bottom of the device(s) to be mounted.
6. Secure the device(s) to the bottom plate with the provided screws.
7. Slide the top plate up the pipe until the pipe collar is positioned just below the cable access hole. Tighten the set screws until they just grip the pipe. At least three set screws must come in contact with the pipe.
8. Ensure that the front of the top plate is facing toward the projector screen. This may require turning the pipe with a wrench. When the top plate is level and correctly oriented, secure it by fully tightening the set screws.

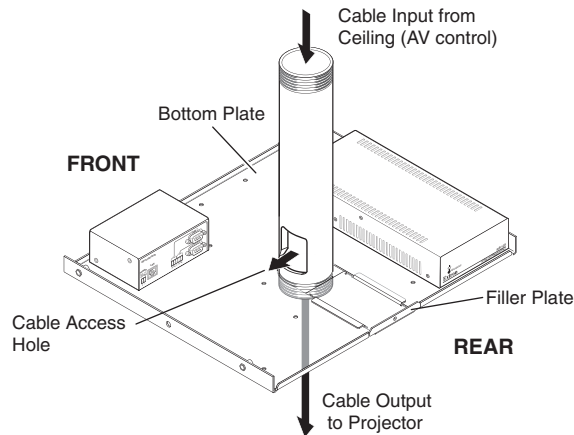


Figure 13 — Routing the cables for the PMK 450

9. Reroute the cables so that they exit the pipe through the cable access hole.
10. Connect the cables to the device(s.) Pull excess cable back into the ceiling.
11. Feed the device(s) output cables to the projector through the cable access hole and out through the bottom of the pipe.

12. Once all cables are routed, insert the lugs on the bottom plate into the slots on the top plate and slide the bottom plate into position.

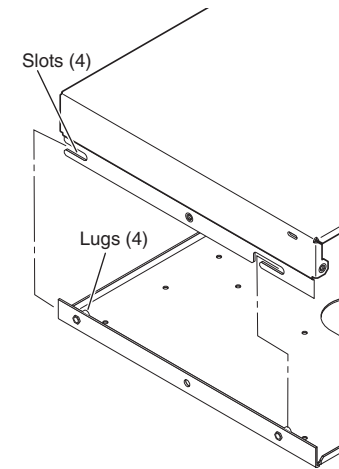


Figure 14 — Attaching PMK 450 bottom plate to the top plate

13. Lock the top and bottom plates together with the security screws and reattach the front and rear plates.

Specifications

General

| | |
|--------------------|---|
| Power input | 100 VAC to 240 VAC, 50/60 Hz, internal, autoswitchable, 1 A maximum Without a load: 3.6 watts With a full load on all outputs: 42 watts |
| Power output | 12 VDC, 3 A maximum total current of the 8 outputs |

NOTE Maximum output current is rated at an ambient temperature of 40 °C. It decreases to 2 A at an ambient temperature of 50 °C.

| | |
|----------------------------|--|
| Temperature/humidity | Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing |
| Rack mount | Yes, with optional 1U, 9.5" deep rack shelf, part #60-190-01 or 60-604-01. Also furniture mountable with optional brackets, part #70-077-01. Above-projector mountable with optional PMK 350 Low Profile Projector Mounting Kit (part #70-563-02, 03) or PMK 450 Easy Installation Projector Mounting Kit (part #70-618-02, -03) |
| Enclosure type | Metal |
| Enclosure dimensions | 1.75" H x 4.3" W x 8.5" D (1U high, quarter rack wide) 4.4 cm H x 11.0 cm W x 21.6 cm D (Depth excludes connectors.) |
| Product weight | 1.2 lbs (0.5 kg) |
| Shipping weight | 3 lbs (2 kg) |
| Vibration | ISTA 1A in carton (International Safe Transit Association) |
| Listings..... | UL 60950 |
| Compliances..... | CE, FCC Class A, VCCI, AS/NZS, ICES |
| MTBF..... | 30,000 hours |
| Warranty | 3 years parts and labor |

NOTE All nominal levels are at ±10%.

NOTE Specifications are subject to change without notice.

Included Parts

These items are included in each order for a PS 123 power supply:

| Included parts | Part number |
|--|-------------|
| PS 123 Power Supply | 60-814-01 |
| (8) Female, 3.5 mm, 2-pole captive screw connector | 10-702-10LF |
| (4) Rubber feet (not attached) | |
| IEC power cord | |
| Tweezer (small screwdriver) | |
| PS 123 User's Guide | |

Accessories

| Accessories | Part number |
|--|-------------|
| Flexible Conduit Adapter Kit | 70-228-02 |
| PMK 350 Low Profile Multi-product Projector Mount Kit | |
| Black | 70-563-02 |
| White | 70-563-03 |
| PMK 450 Easy Install Multi-product Projector Mount Kit | |
| Black | 70-618-02 |
| White | 70-618-03 |
| RSU 129 1U 9.5" Universal rack shelf | 60-190-01 |
| RSB 129 1U 9.5" Deep Basic Rack Shelf | 60-604-01 |
| MBU 125 1U Under-Desk Mounting Kit | 70-077-01 |

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